Attachment J04

Fort Rucker Wastewater Collection System

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J04 Fort Rucker Wastewater Collection System

J04.1 Fort Rucker Area Overview

Fort Rucker, Alabama is a U.S. Army Installation situated approximately 90 miles south of Montgomery, the state capital, and thirty miles northwest of Dothan. The cities of Enterprise, Daleville, and Ozark are just west, south, and east respectively. Occupying over 63,000 acres in the southeastern Alabama countryside, Fort Rucker was established in 1942 in response to the outbreak of World War II. Named after Confederate General Edmund W. Rucker, a Tennessee native, Fort Rucker became involved in Army aviation in August of 1954 when the U.S. Army Aviation School moved there from Fort Sill, Oklahoma. The Installation's population today is 11,000, with more than 4,900 active-duty personnel and 3,300 family members.

Basefields and stagefields were added to the installation's holdings as the years passed to support aviation training practices. The addition of new stagefields and changes to existing stagefields have been made to include additional acreage, update facilities and handle new equipment or other requirements. Cairns Army Airfield is located about 2 miles south of the Daleville Gate along Highway 85. The airfield is 1,297 acres in size with approximately 90 buildings. The field was acquired in 1952. Shell Army Heliport is an integral part of the operations at Fort Rucker and is located to the southwest of the Fort. Shell Army Heliport is 293 acres in size and was first acquired in 1962. The stagefields are located in several southeastern Alabama counties surrounding the Main Post. Allen Stagefield is the closest to the Daleville gate of Fort Rucker (about 4 ½ miles SW) and Louisville Stagefield is the furthest from the same gate (about 20 ½ miles NNE). There are 14 total stagefields including both the active and inactive sites. Most are within an eight-mile radius of the City of Enterprise. Refer to Section J04.8 for a complete listing of the stagefields. The stagefields are activated and deactivated in response to Army Aviation training requirements. The most recent additions were Brown, Stinson, and 10-C Stagefields in 1987.

J04.2 Wastewater Collection System Description

The Fort Rucker wastewater collection systems comprise all appurtenances physically connected to the systems from the point in which the Government ownership currently starts to the point of demarcation defined in part J04.11 of this Section. The systems may include, but are not limited to the lift stations, pump basins, septic tanks, drain fields, treatment facilities, collection piping and appurtenances. The following description and inventory is included to provide the Offeror with a general understanding of the size and configuration of the collection system. Under no circumstances shall the successful Contractor be entitled to any rate adjustments based on the accuracy of the following description and inventory.

Wastewater system permits are not transferable. When the Contractor assumes operation of the wastewater system, it is the responsibility of the Contractor to file an application for transfer of the permit. The application must be received by the Alabama Department of Environmental Management at least six weeks before new operation of the system is to begin.

The Contractor shall comply with all applicable federal, state, and local regulations governing the operation of the wastewater system.

J04.2.1 Wastewater Collection System Fixed Equipment Inventory

J04.2.1.1 Description

The wastewater collection system at Fort Rucker's Main Post consists of collection piping, lift stations and treatment facilities. The original system in the cantonment area was constructed in the 1940's, and improvements have been made as needed since that time. All wastewater produced on the Fort as well as that from Hanchey, Lowe and Knox Army Heliports is treated at the Fort's 2.5 million gallon per day wastewater treatment plant. This treatment plant is an activated sludge plant originally constructed in 1942. The treatment train includes equalization basins, bar screens, grit chambers, grease basins, primary settling basins, aeration basins, secondary settling basins, a chlorine contact chamber, and dechlorination facilities. Treated wastewater is discharged into nearby Claybank Creek in accordance with the Alabama Department of Environmental Management's National Pollutant Discharge Elimination System Permit. Sludge handling facilities include aerobic digesters and uncovered sludge drying beds. Upgrades to the plant since its construction include addition of the equalization basins, headworks modifications, and digester modification from anaerobic to aerobic. Other areas within the Main Post area are treated on-site using septic tanks and drain fields.

Cairns Army Airfield contains the only other wastewater treatment facility at Fort Rucker besides the Main Post plant. The Cairns Army Airfield Wastewater Treatment Plant is classified as an extended aeration plant with a capacity of 500,000 gallons per day. The treatment train includes a comminutor, two aeration basins, two final clarifiers, and a chlorine contact chamber. Treated wastewater is discharged into a nearby stream in accordance with the Alabama Department of Environmental Management's National Pollutant Discharge Elimination System Permit. There is minimal waste sludge produced at this plant. The influent to the plant from the airfield tends to be a majority of wastewater from aircraft washing operations; domestic waste is a small percentage of the total flow. For this reason, the plant is underloaded and has a large amount of available capacity.

The wastewater collection system at Shell Army Heliport consists of approximately 2,600 feet of 8-inch diameter and 400 feet of 6-inch diameter gravity sewers, 5,600 feet of 4-inch diameter force main, 10 manholes and one lift pump station. Shell Army Heliport's wastewater treatment and disposal is provided by the City of Enterprise.

The wastewater collection systems at the outlying stagefields consists of collection piping, lift stations, pump basins, and treatment facilities. All of the stagefields utilize septic tanks and drain fields. Some have had some enhancements added as shown in the tables below.

Backup emergency generators that serve specific equipment of the wastewater collection system, such as lift stations, shall be conveyed as part of that particular system.

J04.2.1.2 Inventory

Tables 1-31 provide a general listing of the major fixed assets for the Fort Rucker wastewater system. The system will be sold in an "as is, where is" condition without any warrant, representation, or obligation on the part of Government to make any alterations, repairs, or improvements. Ancillary equipment attached to, and necessary for operating the system, though not specifically mentioned herein, is considered part of the purchased utility.

J04.2.1.2.A Wastewater Collection System Inventory – Main Post

Table 1 Fixed Inventory

Wastewater Collection System – Fort Rucker Main Post

Item	Size (inches)	Quantity	Unit	Approximat Year of Construction
Gravity Pipe and Force Mains				
Vitrified Clay	<4	240	Linear Feet	1941
Vitrified Clay	<4	4,680	Linear Feet	1953
Vitrified Clay	4	320	Linear Feet	1941
Vitrified Clay	6	64,780	Linear Feet	1941
Vitrified Clay	6	80	Linear Feet	1950
Vitrified Clay	6	1,600	Linear Feet	1953
Vitrified Clay	6	480	Linear Feet	1963
Vitrified Clay	8	52,000	Linear Feet	1941
Vitrified Clay	8	12,260	Linear Feet	1950
Vitrified Clay	8	4,200	Linear Feet	1953
Vitrified Clay	8	86,500	Linear Feet	1960
Vitrified Clay	8	6,520	Linear Feet	1963
Vitrified Clay	8	2,960	Linear Feet	1994
Concrete	10	13,320	Linear Feet	1941
Concrete	10	1,280	Linear Feet	1950
Vitrified Clay	10	4,480	Linear Feet	1950
Vitrified Clay	10	3,900	Linear Feet	1960
Concrete	12	9,120	Linear Feet	1941
Concrete	12	380	Linear Feet	1950
Concrete	12	2,100	Linear Feet	1960
Vitrified Clay	14	2,240	Linear Feet	1941
Concrete	15	2,800	Linear Feet	1941
Vitrified Clay	15	6,800	Linear Feet	1941
Vitrified Clay	15	280	Linear Feet	1950
Vitrified Clay	15	880	Linear Feet	1960
Concrete	18	6,800	Linear Feet	1941
Concrete	21	3,600	Linear Feet	1941
Vitrified Clay	21	5,540	Linear Feet	1941
Piping Total		300,140	 Linear Feet	
Building Services		1,270	Each	1941-1960
Manholes		1,044	Each	1941-1960
Lift Stations		9	Each	1941-1995
Wastewater Treatment Facility – Activated Sluc	lge Process	2.5	Million Gallons per day	1942

Ech Stagefield

Wastewater produced at this stagefield is treated in a septic tank and then distributed in a drain field.

Table 2 Fixed Inventory

Wastewater Collection System - Ech Stagefield

Item	Size (inches)	Quantity	Unit	Approximate Year of Construction
Gravity Pipe (unknown material)	4	40	Linear Feet	1999
Gravity Pipe (unknown material)	6	240	Linear Feet	1975
Piping Total		280	Linear Feet	
Building Services		4	Each	1975, 1999
Septic Tank with Drain Field		1,000	Gallons	1975

Hammond Range

This range is currently unutilized. Wastewater produced at this range is treated in a septic tank and then distributed in a drain field.

Table 3
Fixed Inventory

Wastewater Collection System – Hammond Range

Item	Size (inches)	Quantity	Unit	Approximate Year of
PVC Gravity Pipe	Unknown	20	Linear Feet	Construction 1984
Piping Total	Chkhowh	20	Linear Feet	1704
Building Services		1	Each	1984
Septic Tank with Drain Field		1,000	Gallons	1984

Hatch Stagefield

This stagefield is currently unutilized. Wastewater produced at this stagefield is treated in a septic tank and then distributed in a drain field.

Table 4
Fixed Inventory

Wastewater Collection System - Hatch Stagefield

" aste " ater concetion by stem	materi Stagemena			
Item	Size (inches)	Quantity	Unit	Approximate Year of
				Construction
Gravity Pipe (unknown material)	6	105	Linear Feet	1975
Piping Total		105	Linear Feet	
Building Services		2	Each	1975
Septic Tank with Drain Field		2,000	Gallons	1975

Hooper Stagefield

Wastewater produced at this stagefield is treated in septic tanks and then distributed in drain fields.

Table 5
Fixed Inventory

Wastewater Collection System - Hooper Stagefield

rissper stagement			
Size (inches)	Quantity	Unit	Approximate Year of Construction
4	80	Linear Feet	1999
6	110	Linear Feet	1975
6	60	Linear Feet	1979
•	250	Linear Feet	
	3	Each	1975-1999
	1,000	Gallons	1975
	1,000	Gallons	1979
	Size (inches) 4 6	Size (inches) Quantity 4 80 6 110 6 60 250 3 1,000	Size (inches) Quantity Unit 4 80 Linear Feet 6 110 Linear Feet 6 60 Linear Feet 250 Linear Feet 3 Each 1,000 Gallons

Lake Tholocco Recreation Area: Archery Range

Wastewater produced at this area is treated in a septic tank and then distributed in a drain field.

Table 6
Fixed Inventory

Wastewater Collection System – Archery Range

Item	Size (inches)	Quantity	Unit	Approximate Year of Construction
Gravity Pipe (unknown material)	6	600	Linear Feet	1970
Piping Total		600	Linear Feet	
Building Services		2	Each	1970
Septic Tank with Drain Field		Unknown	Gallons	1970

Lake Tholocco Recreation Area: East Beach

Wastewater produced at this area is pumped to a septic tank and then distributed in a drain field.

Table 7
Fixed Inventory

Wastewater Collection System – East Beach

Item	Size (inches)	Quantity	Unit	Appr oximate Year of Construction
Vitrified Clay Gravity Pipe	8	1,210	Linear Feet	1957
Cast Iron Force Main	8	2,355	Linear Feet	1957
Piping Total		3,565	Linear Feet	
Building Services		9	Each	1957
Manholes		6	Each	1957
Lift Station with Bar Screen and Flu me		540,000	Gallons per day	2001
Septic Tank with Drain Field		Unknown	Gallons	Unknown

Lake Tholocco Recreation Area: Engineer's Beach

Wastewater produced at this area is treated in septic tanks and then distributed in drain fields.

Table 8
Fixed Inventory

Wastewater Collection System – Engineer's Beach

Item	Size (inches)	Quantity	Unit	Approximate Year of Construction
Cast Iron Gravity Pipe	6	50	Linear Feet	1972
Piping Total		50	Linear Feet	1072
Building Services Septic Tank with Drain Field		1,000	Each Gallons	1972 1972
Septic Tank with Drain Field		1,000	Gallons	1972

Lake Tholocco Recreation Area: Singing Pines

Wastewater produced at this area is treated in a septic tank and then distributed in a drain field.

Table 9
Fixed Inventory

Wastewater Collection System – Singing Pines

Item	Size (inches)	Quantity	Unit	Approximate Year of Construction
Gravity Pipe (unknown material)	6	10	Linear Feet	Unknown
Piping Total		10	Linear Feet	
Building Services		1	Each	
Septic Tank with Drain Field		Unknown	Gallons	Unknown

Lake Tholocco Recreation Area: West Beach

Wastewater produced at this area is treated in a septic tank and then distributed in a drain field.

Table 10 Fixed Inventory Wastewater Collection System – West Beach

" diste " diet Concetton by stein	West Beach			
Item	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping Total	Unknown	Unknown	Linear Feet	Unknown
Building Services		2	Each	Unknown
Septic Tank with Drain Field		Unknown	Gallons	Unknown

Lake Tholocco Recreation Area: Wildlife

Wastewater produced at this area is pumped to a septic tank where it is treated and then distributed in a drain field.

Table 11 Fixed Inventory

Wastewater Collection System – Wildlife

Item	Size (inches)	Quantity	Unit	Approximate Year of Construction
Gravity Pipe (unknown material)	Unknown	400	Linear Feet	Unknown
Force Main (unknown material)	Unknown	480	Linear Feet	Unknown
Piping Total		880	Linear Feet	
Building Services		2	Each	Unknown
Lift Station		Unknown	Gallons per	Unknown
			day	
Septic Tank with Drain Field		Unknown	Gallons	Unknown

Matteson Range

This range is currently unutilized. Wastewater produced at this range is treated in a septic tank and then distributed in a drain field.

Table 12 Fixed Inventory

Wastewater Collection System - Matteson Range

Widteson Range			
Size (inches)	Quantity	Unit	Approximate Year of Construction
4	30	Linear Feet	1986
	30	Linear Feet	
	1	Each	1986
	1,500	Gallons	1986
	<u> </u>	Size (inches) Quantity 4 30 30 1	Size (inches) Quantity Unit 4 30 Linear Feet 30 Linear Feet 1 Each

Molinelli Forward Arming and Refueling Point

Wastewater produced at this range is treated in septic tanks and then distributed in drain fields.

Table 13 Fixed Inventory

Wastewater Collection System – Molinelli Forward Arming and Refueling Point

Item	Size (inches)	Quantity	Unit	Approximate Year of Construction
Gravity Pipe (unknown material)	6	415	Linear Feet	1991
Piping Total	•	415	Linear Feet	
Building Services		5	Each	1991
Manholes		5	Each	1991
Septic Tank with Drain Field		2,000	Gallons	1991
Septic Tank with Drain Field		2,000	Gallons	1991
Septic Tank with Drain Field		1,500	Gallons	1991

Range Control

Wastewater produced at this area is treated in septic tanks and then distributed in drain fields.

Table 14 Fixed Inventory

Wastewater Collection System – Range Control

Item	Size (inches)	Quantity	Unit	Approximate Year of Construction
Gravity Pipe (unknown material)	4	20	Linear Feet	1991
Gravity Pipe (unknown material)	6	180	Linear Feet	Unknown
Gravity Pipe (unknown material)	6	90	Linear Feet	1991
Piping Total		290	Linear Feet	
Building Services		3	Each	Unknown
Septic Tank with Drain Field		1,000	Gallons	1991
Septic Tank with Drain Field		1,000	Gallons	1991

Tabernacle Stagefield

Wastewater produced at this stagefield is treated in a septic tank and then distributed in a drain field.

Table 15 Fixed Inventory

Wastewater Collection System – Tabernacle Stagefield

Tabelliacie Blagellei	u		
Size (inches)	Quantity	Unit	Approximate Year of Construction
4	60	Linear Feet	1989
6	50	Linear Feet	1981
	110	Linear Feet	
	2	Each	1981
	Unknown	Gallons	1981
	Size (inches)	Size (inches) Quantity 4 60 6 50 110 2	Size (inches) Quantity Unit 4 60 Linear Feet 6 50 Linear Feet 110 Linear Feet 2 Each

J04.2.1.2.B Wastewater Collection System Inventory – Basefields

Cairns Army Airfield

Table 16 Fixed Inventory

Wastewater Collection System - Cairns Army Airfield

Item	Size (inches)	Quantity	Unit	Approximate Year of Construction
Concrete Gravity Pipe	4	75	Linear Feet	1953
Polyvinyl Chloride Gravity Pipe	4	325	Linear Feet	2000
Concrete Gravity Pipe	6	200	Linear Feet	1953
Polyvinyl Chloride Gravity Pipe	6	1,860	Linear Feet	2000
Concrete Gravity Pipe	8	450	Linear Feet	1953
Polyvinyl Chloride Gravity Pipe	8	8,975	Linear Feet	2000
Piping Total		11,435	Linear Feet	
Building Services		16	Each	1953
Manholes		53	Each	2000
Wastewater Treatment Facility – Extended A	eration Process	500,000	Gallons per day	1964

Shell Army Heliport

Table 17 Fixed Inventory

Wastewater Collection System – Shell Army Heliport

Item	Size	Quantity	Unit	Approximate
	(inches)			Year of Construction
PVC Force Main	4	5,600	Linear Feet	1986
Cast Iron Gravity Pipe	6	400	Linear Feet	1953
Vitrified Clay Gravity Pipe	8	2,360	Linear Feet	1953
PVC Gravity Pipe	8	270	Linear Feet	1992
Piping Total	·	8,630	Linear Feet	
Building Services		7	Each	1953
Manholes		10	Each	1953
Lift Station		Unknown	Gallons per dav	1986

J04.2.1.2.C Wastewater Collection System Inventory – Outlying Stagefields

10-C Stagefield

Wastewater produced at this stagefield is treated in septic tanks and then pumped to Puraflow peat-based effluent treatment modules, where it is treated and then distributed in a drain field.

Table 18
Fixed Inventory
Westerwater Collection System 10.6

Wastewater Collection System – 10-C Stagefield

Item	Size (inches)	Quantity	Unit	Approximate Year of Construction
PVC Force Main	2	330	Linear Feet	1987
Gravity Pipe (unknown material)	6	330	Linear Feet	1987
Piping Total		660	Linear Feet	
Building Services		3	Each	1987
Septic Tank		1,000	Gallons	1987
Septic Tank		1,000	Gallons	1987
Septic Tank		1,000	Gallons	1996
Pump Basin		Unknown	Gallons per	1996
•			day	
Puraflow Modules with Drain Field		8	Each	1996
			Module	

Allen Stagefield

Wastewater produced at this stagefield is treated in a septic tank and then distributed in a drain field.

Table 19 Fixed Inventory

Wastewater Collection System Inventory – Allen Stagefield

Item	Size (inches)	Quantity	Unit	Approximate Year of Construction
Gravity Pipe (unknown material)	4	90	Linear Feet	1999
Gravity Pipe (unknown material)	6	255	Linear Feet	1974
Piping Total		345	Linear Feet	
Building Services		3	Each	1974, 1999
Septic Tank with Drain Field		1,000	Gallons	1974

Brown Stagefield

Wastewater produced at this stagefield is treated in septic tanks and then distributed in a drain field.

Table 20 Fixed Inventory

Wastewater Collection System - Brown Stagefield

Item	Size (inches)	Quantity	Unit	Approximate Year of Construction
Gravity Pipe (unknown material)	4	30	Linear Feet	1987
Gravity Pipe (unknown material)	6	120	Linear Feet	1987
Piping Total		150	Linear Feet	
Building Services		3	Each	Unknown
Septic Tank with Drain Field		1,000	Gallons	Unknown
Septic Tank with Drain Field		1,450	Gallons	Unknown

Goldberg Stagefield

Wastewater produced at this stagefield is treated in septic tanks and then pumped to a drain field.

Table 21 Fixed Inventory

Wastewater Collection System - Goldberg Stagefield

Item	Size (inches)	Quantity	Unit	Approximate Year of Construction
PVC Force Main	<4	1,200	Linear Feet	1991
Gravity Pipe (unknown material)	4	15	Linear Feet	1961
Gravity Pipe (unknown material)	4	45	Linear Feet	1999
PVC Gravity Pipe	4	10	Linear Feet	1991
Gravity Pipe (unknown material)	6	20	Linear Feet	1961
Gravity Pipe (unknown material)	6	30	Linear Feet	1975
PVC Gravity Pipe	6	10	Linear Feet	1991
Piping Total	•	1,330	Linear Feet	
Building Services		3	Each	1961,1991
Pump Basin		Unknown	Gallons per	1991
			day	
Septic Tank		Unknown	Gallons	1961
Septic Tank with Drain Field		1,500	Gallons	1991

High Bluff Stagefield

Wastewater produced at this stagefield is pumped to a septic tank where it is treated and then distributed in a drain field.

Table 22 Fixed Inventory

Wastewater Collection System – High Bluff Stagefield

Item	Size (inches)	Quantity	Unit	Approximate Year of Construction
Force Main (unknown material)	2	45	Linear Feet	1999
Gravity Pipe (unknown material)	6	150	Linear Feet	1973
Piping Total	·	195	Linear Feet	
Building Services		2	Each	1973, 1999
Pump Basin		Unknown	Gallons per	1999
			day	
Septic Tank with Drain Field		1,000	Gallons	1973

High Falls Stagefield

This stagefield is currently unutilized. Wastewater produced at this stagefield is treated in a septic tank and then distributed in a drain field.

Table 23
Fixed Inventory

Wastewater Collection System – High Falls Stagefield

Item	Size (inches)	Quantity	Unit	Approximate Year of Construction
Gravity Pipe (unknown material)	Unknown	50	Linear Feet	1973
Piping Total		50	Linear Feet	
Building Services		2	Each	1973
Septic Tank with Drain Field		1,000	Gallons	1973

Hunt Stagefield

Wastewater produced at this stagefield is treated in a septic tank and then distributed in a drain field.

Table 24
Fixed Inventory

Wastewater Collection System - Hunt Stagefield

Item	Size (inches)	Quantity	Unit	Approximate Year of Construction
Gravity Pipe (unknown material)	4	50	Linear Feet	1989
Gravity Pipe (unknown material)	4	70	Linear Feet	1999
Gravity Pipe (unknown material)	6	150	Linear Feet	Unknown
Gravity Pipe (unknown material)	6	70	Linear Feet	1975
Piping Total	·	340	Linear Feet	
Building Services		4	Each	1975-1999
Septic Tank with Drain Field		1,000	Gallons	Unknown

Louisville Stagefield

This stagefield is currently unutilized. Wastewater produced at this stagefield is treated in a septic tank and then distributed in a drain field.

Table 25
Fixed Inventory

Wastewater Collection System – Louisville Stagefield

- · · · · · · · · · · · · · · · · · · ·				
Item	Size (inches)	Quantity	Unit	Approximate Year of Construction
Gravity Pipe (unknown material)	6	75	Linear Feet	1981
Piping Total		75	Linear Feet	
Building Services		1	Each	1981
Septic Tank with Drain Field		Unknown	Gallons	1981

Skelly Stagefield

Wastewater produced at this stagefield is treated in a septic tank and then distributed in a drain field.

Table 26
Fixed Inventory

Wastewater Collection System – Skelly Stagefield

Waste water Concetton bystem	Dicity Diagenera			
Item	Size (inches)	Quantity	Unit	Approximate Year of
				Construction
Gravity Pipe (unknown material)	4	80	Linear Feet	1999
Gravity Pipe (unknown material)	6	220	Linear Feet	1973
Piping Total		300	Linear Feet	
Building Services		3	Each	1973, 1999
Septic Tank with Drain Field		1,000	Gallons	1973

Stinson Stagefield

Wastewater produced at this stagefield is treated in septic tanks and then distributed in drain fields.

Table 27
Fixed Inventory

Wastewater Collection System – Stinson Stagefield

- The second consequence of second	2011130112000			
Item	Size (inches)	Quantity	Unit	Approximate Year of
				Construction
Gravity Pipe (unknown material)	6	285	Linear Feet	1987
Piping Total	•	285	Linear Feet	
Building Services		3	Each	1987
Septic Tank with Drain Field		1,000	Gallons	1987
Septic Tank with Drain Field		1,400	Gallons	1987

TAC-Runkle Stagefield

This stagefield is currently unutilized. Wastewater produced at this stagefield is treated in septic tanks and then distributed in drain fields.

Table 28 Fixed Inventory

Wastewater Collection System – TAC-Runkle Stagefield

	<u> </u>			
Item	Size (inches)	Quantity	Unit	Approximate Year of
				Construction
Gravity Pipe (unknown material)	6	30	Linear Feet	Unknown
Piping Total		30	Linear Feet	
Building Services		2	Each	Unknown, 1982
Septic Tank with Drain Field		Unknown	Gallons	Unknown
Septic Tank with Drain Field		Unknown	Gallons	1982

TAC-X Stagefield

This stagefield is currently unutilized. Wastewater produced at this stagefield is treated in septic tanks and then pumped to a drain field.

Table 29 Fixed Inventory

Wastewater Collection System – TAC-X Stagefield

THE STATE OF THE S	1110 11 5 00 5 01101	-		
Item	Size (inches)	Quantity	Unit	Approxi mate Year of Construction
PVC Force Main	<4	1,115	Linear Feet	1995
PVC Gravity Pipe	4	15	Linear Feet	1995
Cast Iron Gravity Pipe	6	35	Linear Feet	1991
Piping Total		1,165	Linear Feet	
Building Services		1	Each	1995
Pump Basin		Unknown	Gallons per day	1995
Septic Tank		1,450	Gallons	Unknown
Septic Tank with Drain Field		1,000	Gallons	1995

Toth Stagefield

Wastewater produced at this stagefield is treated in a septic tank and then distributed in a drain field.

Table 30 Fixed Inventory

Wastewater Collection System - Toth Stagefield

Item	Size (inches)	Quantity	Unit	Approximate Year of Construction
Gravity Pipe (unknown material)	4	65	Linear Feet	1989
Gravity Pipe (unknown material)	6	120	Linear Feet	Unknown
Gravity Pipe (unknown material)	6	55	Linear Feet	1974
Piping Total		240	Linear Feet	
Building Services		2	Each	1974
Septic Tank with Drain Field		Unknown	Gallons	1974

J04.2.2 Wastewater Collection System Non-Fixed Equipment and Specialized Tools Inventory

Table 31 lists other ancillary equipment (spare parts) and **Table 32** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment and tools. The successful Contractor shall provide any and all equipment, vehicles, and tools, whether included in the purchase or not, to maintain a fully operating system under the terms of this contract.

Table 31 Spare Parts

Wastewater Collection System – Fort Rucker

Qty	Item	Make/Model	Description	Remarks
None.				

Table 32

Specialized Equipment and Vehicles

Wastewater Collection System – Fort Rucker

Description	Quantity	Location	Maker	
				_

None.

J04.2.3 Wastewater Collection System Manuals, Drawings, and Records Inventory

Table 33 lists the manuals, drawings, and records that will be transferred with the system.

Table 33

Manuals, Drawings, and Records

Wastewater Collection System – Fort Rucker

Qty	Item	Description	Remarks

The installation maintains a limited collection of manuals, drawings and records on installed components of the wastewater collection system. This information or copies thereof will be transferred during the transition period.

J04.3 Current Service Arrangements

There are no current service arrangements with any organization to provide wastewater collection service on the Main Post, at Cairns Army Airfield, or at the stagefields. Shell Army Heliport currently discharges its wastewater to the City of Enterprise.

J04.4 Secondary Metering

The Installation may require secondary meters for internal billings of their reimbursable customers, utility usage management, and energy conservation monitoring. The Contractor shall assume full ownership and responsibility for existing and future secondary meters IAW Clause C.3.

J04.4.1 Existing Secondary Meters

Table 34 provides a listing of the existing (at the time of contract award) secondary meters that will be transferred to the Contractor. The Contractor shall provide meter readings once a month for all secondary meters IAW C.3 and J04.5 below.

Table 34

Existing Secondary Meters

Wastewater Collection System – Fort Rucker

Meter Location: Building Number Description

None.

J04.4.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 35**. New secondary meters shall be installed IAW Clause C.13, Operational Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Clauses C.3 and J04.5 below.

Table 35

New Secondary Meters

Wastewater Collection System – Fort Rucker

Meter Location Meter Description

None.

J04.5 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following: Invoice (IAW G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to the Contracting Officer's designee. (This information will be provided upon award.)

Outage Report. The Contractor's monthly outage report will be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall include the following information for Scheduled and Unscheduled outages:

Scheduled: Requestor, date, time, duration, facilities affected, feedback provided during outage, outage notification form number, and digging clearance number.

<u>Unscheduled:</u> Include date, time and duration, facilities affected, response time after notification, completion times, feedback provided at time of outage, specific item failure, probability of future failure, long term fix, and digging clearance number.

Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to the Contracting Officer's designee. (This information will be provided upon award.)

Meter Reading Report. The monthly meter reading report shall show the current and previous month readings for all secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to the Contracting Officer's designee. (This information will be provided upon award.)

System Efficiency Report. If required by Paragraph C.3, the Contractor shall submit a system efficiency report in a format proposed by the Contractor and accepted by the Contracting Officer. System efficiency reports shall be submitted by the 25th of each month for the previous month. System efficiency reports shall be submitted to the Contracting Officer's designee. (This information will be provided upon award.)

J04.6 Energy Savings and Conservation Projects

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IAW C.3, Utility Service Requirement. No projects have been currently implemented by the Installation for energy conservation purposes.

J04.7 Infiltration and Inflow (I&I) Projects

There are currently no infiltration and inflow projects in development or execution.

J04.8 Service Area

IAW Clause C.4, Service Area. The service area is defined as the cantonment area of Fort Rucker, otherwise known as the Main Post, as well as the three housing areas (Allen Heights, Bowden Terrace, and Munson Heights). The Hanchey, Knox, Lowe, Ech, Hammond, Matteson, Molinelli, Range Control, Tabernacle, Hooper, Lake Tholocco, and Hatch sites are also included in the service area. The service area of each basefield is defined as the area within the boundaries of Shell Army Heliport and Cairns Army Airfield. The service area of each stagefield is defined as the boundaries of each stagefield. To provide an overview the following table lists approximate distances to the Daleville gate of Fort Rucker by air, direction from gate, size of the stagefield in acres, number of buildings, and date acquired.

Table 36 Service Areas Wastewater Collection System – Fort Rucker Stagefields

Stagefield	Distance (Miles)	Direction	Size (Acres)	Numbers of Buildings	Date Acquired
10-C Stagefield	13	W, SW	180	5	1987
Allen Stagefield	$4\frac{1}{2}$	S, SW	114	6	1960
Brown Stagefield	9	W, NW	176	5	1987
Goldberg Stagefield	91/2	E, NE	100	8	1961
High Bluff Stagefield	71/2	S	190	6	1966

High Falls Stagefield	10	S, SW	40	3	1967
Hunt Stagefield	5	E, NE	153	5	-
Louisville Stagefield	21	N	104	8	1970
Skelly Stagefield	15	W, SW	194	5	-
Stinson Stagefield	10	W	191	5	1987
TAC-Runkle Stagefield	$14\frac{1}{2}$	W	235	13	-
TAC-X Stagefield	13	SW	111	4	-
Toth Stagefield	$6\frac{1}{2}$	SE	128	5	-

J04.9 Off-Installation Sites

There are no off-installation sites included in this package.

J04.10 Specific Transition Requirements

IAW Clause C.13, Operational Transition Plan. **Table 37** lists service connections and disconnections required upon transfer, and **Table 38** lists the improvement projects required upon transfer of the Fort Rucker wastewater system.

Table 37
Service Connections and Disconnections
Wastewater Collection System – Fort Rucker

wastewater Concetton bystem	1 Oft Rucker
Location	Description

None.

Table 38
System Improvement Projects
Wastewater Collection System – Fort Rucker

Location	Description	Year of Completion
Replace Family Housing Area 1	800 LF of 6-inch Sewer Main	2008
Wastewater System	14,400 LF of 8-inch Sewer Main	
	68 Manholes	
Replace Main Post Area A Wastewater	1,000 LF of 6-inch Sewer Main	2003
System	7,200 LF of 8-inch Sewer Main	
	15,600 LF of 10-inch Sewer Main	
	70 Manholes	
Replace Family Housing Area 2	1,200 LF of 6-inch Sewer Main	2003
Wastewater System	15,200 LF of 8-inch Sewer Main	
	3,600 LF of 10-inch Sewer Main	
	77 Manholes	
Replace Hanchey Wastewater System	1,000 LF of 6-inch Sewer Main	2003
	400 LF of 12-inch Sewer Main	
	8,800 LF of 15-inch Sewer Main	
	28 Manholes	
Replace Main Post Area B Wastewater	6,000 LF of 10-inch Sewer Main	2003
System	400 LF of 12-inch Sewer Main	
	8,800 LF of 15-inch Sewer Main	
	101 Manholes	
Replace Main Post Wastewater Treatment	Replace Entire Wastewater	The wastewater plant is currently
Plant	Treatment Plant, Facilities and	performing in accordance with all
	Appurtenances (2.5 MGD to	permits at this time. The
	secondary limits or as required)	Contractor is required to maintain
		continued compliance with all

		future permits, which will involve preventive maintenance and planning as well as capital expenditure.
Replace Main Post Area C Wastewater System	400 LF of 6-inch Sewer Main 8,400 LF of 8-inch Sewer Main 15,400 LF of 10-inch Sewer Main 2,000 LF of 12-inch Sewer Main 4,400 LF of 15-inch Sewer Main 122 Manholes	2004
Replace Family Housing Area 3 Wastewater System	18,400 LF of 8-inch Sewer Main 3,100 LF of 10-inch Sewer Main 90 Manholes	2004
Replace Main Post Area D Wastewater System	1,200 LF of 8-inch Sewer Main 9,800 LF of 18-inch Sewer Main 1,400 LF of 21-inch Sewer Main 26 Manholes	2005
Replace Main Post Area E Wastewater System	17,400 LF of 10-inch Sewer Main 1,200 LF of 18-inch Sewer Main 75 Manholes	2006
Replace Family Housing Area 4 Wastewater System	21,600 LF of 8-inch Sewer Main 1,700 LF of 15-inch Sewer Main 400 LF of 18-inch Sewer Main 100 Manholes	2005
Replace Main Post Area F Wastewater System	400 LF of 6-inch Sewer Main 18,400 LF of 8-inch Sewer Main 8,400 LF of 10-inch Sewer Main 2,000 LF of 12-inch Sewer Main 9,200 LF of 18-inch Sewer Main 124 Manholes	2007
Replace Main Post Area G Wastewater System	2,200 LF of 8-inch Sewer Main 10,400 LF of 10-inch Sewer Main 22,800 LF of 21-inch Sewer Main 79 Manholes	2008
Replace Family Housing Area 5 Wastewater System	14,400 LF of 8-inch Sewer Main 60 Manholes	2007
Replace Main Post Area H Wastewater System	1,200 LF of 8-inch Sewer Main 200 LF of 10-inch Sewer Main 6,800 LF of 18-inch Sewer Main 28 Manholes	2008

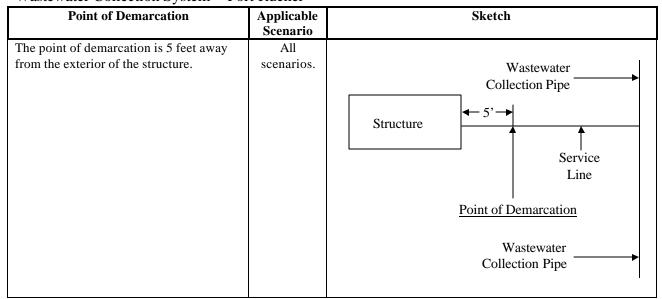
Table 39 System Improvement Projects Wastewater Collection System – Shell Army Heliport

Location	Description	Year of Completion
Shell Army Heliport	300 feet of 6-inch collection pipe	2007
	2,500 feet of 8-inch collection pipe	
	1 manhole	

J04.11 Wastewater Collection System Points of Demarcation

The point of demarcation is defined as the point on the wastewater collection pipe where ownership changes from the Grantee to the building owner. The table below identifies the general locations of these points with respect to the building served.

Table 40 Points of Demarcation Wastewater Collection System – Fort Rucker



J04.11.1 Unique Points of Demarcation

The following table lists anomalous points of demarcation that do not fit any of the above scenarios.

Table 41

Unique Points of Demarcation

Wastewater Collection System – Fort Rucker

Building No.	Point of Demarcation Description
None.	

J04.12 Treatment Plants and Storage Tanks

The following tables list all wastewater treatment plants.

Table 42 Wastewater Treatment Plants Wastewater Treatment System – Fort Rucker

Description	Facility #	State Coordinates	Other Information
Main Post Wastewater Treatment Plant	9801 through	Available from	Activated Sludge Treatment
	9825	installation mapping	Process – 2.5 MGD

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Table 43 Wastewater Treatment Plants

Wastewater Collection System - Cairns Army Airfield

Description	Facility #	State Coordinates	Other Information
Cairns Army Airfield Wastewater		Available from	Extended Aeration
Treatment Plant		installation mapping	Activated Sludge Treatment
			Process – 0.5 MGD

Table 44

Wastewater Treatment Plants

Wastewater Collection System – Fort Rucker Stagefields

Description Facility # State Coordinates Other Information	
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Each stagefield has one or more septic tank/drain field systems.